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Transportation Activities Selected Farmer Cooperatives

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CONTENTS

	Page
Highlights	iv
Introduction	1
Transportation costs	2
Outbound shipments	3
Inbound shipments	4
Factors affecting mode of transportation	5
Why cooperatives used for-hire regulated transportation	6
Why cooperatives did not use for-hire regulated transportation	7
Why cooperatives used nonregulated trucks	8
Why cooperatives did not use nonregulated trucks	10
Why cooperatives used their own equipment	11
Problems in using own equipment	12
Joint programs	14

HIGHLIGHTS

Of the 100 largest farmer cooperatives, 71 reported transportation costs, types of transportation used, and factors affecting such use.

Sixty-eight cooperatives reported transportation costs of more than $844 million in 1971. Of this, the cooperatives paid $648 million, or 77 percent.

For-hire rail service accounted for about $402 million, or 48 percent of the total cost of transportation. For-hire trucks accounted for 26 percent; common carrier, 9 percent; exempt haulers, 9 percent; contract carrier, 5 percent; co-op trucking association, 3 percent. Private trucks accounted for 11 percent. Rail and trucks accounted for 85 percent of the total cost of transportation.

Fifty-five of the 71 cooperatives either estimated or did not know their transportation cost.

Sixty-five cooperatives reported outbound shipments of more than 71 million tons valued at $8.7 billion. About 30 percent of the outbound tonnage was carried by rail, 27 percent by the cooperatives' own trucks, and 15 percent by for-hire trucks.

Fifty-eight cooperatives reported inbound shipments of 65 million tons valued at $6.2 billion. Rail moved about 34 percent of the inbound tonnage, for-hire trucks 25 percent, and cooperatives' own trucks 18 percent.

The most frequently given reason for using for-hire regulated rail and barges was because they were more economical. "Service best suited needs" was the most frequent reason cooperatives gave for using for-hire regulated trucks.

The reason cooperatives most often gave for not using for-hire rail, regulated trucks, and barges was because service did not suit their needs.

The most frequent reason reported for using nonregulated transportation was that service best suited cooperatives' needs in the case of exempt haulers, co-op trucking associations, and buyers' and sellers' trucks.

The principal reason for not using exempt haulers and co-op trucking associations was that service did not suit cooperatives' needs. Unreliable or inconsistent service was next most frequently reported.

The reason cooperatives most often gave for using their own trucks and railcars was that service best suited their needs.

Problems experienced in using cooperatives' own railcars was equally divided between economic and service problems. Cooperatives most often reported operating problems when using their own trucks. High operating costs followed. Fourteen cooperatives reported that they had no, or only normal, problems in operating their own trucks.

Sixteen cooperatives reported participating in joint distribution, warehousing, and transportation ventures with other cooperatives or, less often, with private organizations.

TRANSPORTATION ACTIVITIES OF SELECTED FARMER COOPERATIVES

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Agricultural Economist

INTRODUCTION

The estimated total freight bill of the United States exceeds $90 billion annually. About 22 percent, or nearly $20 billion of that amount, relates to the transportation of farm and forestry products.[1]

Transportation management and control is important to all firms, including farmer cooperatives, that ship or receive agricultural products.

Farmer Cooperative Service had previously estimated the transportation bill for products handled by all U.S. farmer cooperatives during the business year of 1968-69 at $1.2 billion, or almost 7 percent of the net value of the products moved (table 1).

There is little information available on the distribution of expenditures by mode of transportation. Therefore, the purpose of this study was to develop some basic information in that area.

Such information is needed to help focus cooperative managements' attention on this important but often neglected expense area.

Also, the lack of such information poses problems for the U.S. Department of Agriculture, farm organizations, and farmer cooperatives in

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*Acknowledgment is made to Robert J. Bryne for assistance in planning and carrying out the study.

[1]Ad Hoc Committee on Agricultural Transportation Research, Research Needed to Improve Transportation for Agriculture and Rural America, Science and Education Staff, U.S. Department of Agriculture, March 1973.

Table 1—Estimated volume and transportation bill for products handled by farmer cooperatives, 1968-69[1]

Type of product handled	Estimated volume	Estimated transportation bill
	1,000 tons	*1,000 dollars*
Farm products	121,158	909,764
Farm supplies	45,285	273,530
Total	166,443	1,183,294

[1]Information was derived from various USDA publications and estimates by FCS staff.

presentations before transportation regulatory agencies and legislative bodies.

Questionnaires were mailed to the 100 largest farmer cooperatives[2] requesting information for 1971 on types of transportation available and used, reasons for using or not using various types of transportation, and transportation expenditures by type of transportation. These cooperatives accounted for about 42 percent of the dollar volume of business of all cooperatives and approximately two-thirds of the physical volume of goods handled.

The report that follows, based on data from questionnaires returned, shows the following: (1) Total costs of transportation by each type of for-hire and private carrier and expenditures on other traffic functions; (2) value of outbound and inbound shipments; (3) tonnage moved by the various types of transportation inbound and outbound; (4) reasons for and for not using various modes of transportation; and (5) reasons for cooperatives operating their own transportation equipment and problems related to doing so.

Seventy-one usable questionnaires were returned. Some cooperatives could not answer all of the questions or questions did not apply. This accounts for differences in the number of cooperatives reporting on different subjects in this report.

TRANSPORTATION COSTS

FCS obtained information from 68 cooperatives on the cost of transportation. They reported their transportation bill for 1971 was $844 million (table 2). About 77 percent, or $648 million, of this transportation bill was paid by

[2]The criterion for selecting the 100 largest cooperatives was based on dollar volume of business. The cooperatives also were required to have $5 million or more in assets and physically handle products.

cooperatives. Amounts paid ranged from 37 percent of the cost when products were hauled by buyers' and sellers' trucks to 100 percent of the cost when private barges and pipelines were used.

About $402 million, or 48 percent, of the total transportation bill was spent on for-hire rail service. For-hire trucks accounted for 26 percent of the bill, of which 9 percent each was hauled by common carrier trucks and exempt haulers. About 1 percent of the total transportation bill was spent on traffic management.

Fifty-five of the cooperatives reporting said that they either did not know what their transportation costs were or that the data were estimated.

Table 2—Total transportation expenditures by 68 farmer cooperatives, 1971

Type of carrier	Total expenditures		Paid by cooperatives	
	Amount	Percent of total	Amount	Percent
	Dollars	*Percent*	*Dollars*	*Percent*
For-hire rail	401,830,271	48	308,718,784	77
For-hire truck:				
Common carrier	76,169,251	9	54,577,396	72
Exempt hauler (203b-6)	73,123,314	9	35,837,999	49
Contract carrier	39,298,064	5	35,635,842	91
Co-op trucking association	22,531,340	3	20,605,114	91
Private truck	95,656,227	11	94,133,862	98
Marine (ocean & coastal)	39,608,947	5	28,506,022	72
Buyer' and sellers' trucks	38,051,237	4	14,150,307	37
For-hire barge	25,946,650	3	24,268,478	94
Private pipeline	12,445,620	1	12,445,620	100
For-hire pipeline	10,962,030	1	10,809,570	99
Private barge	1,840,000	([1])	1,840,000	100
Traffic management	6,361,969	1	6,361,969	100
Other[2]	351,495	([1])	351,495	100
Total	844,176,415	100	648,242,458	77

[1]Less than 0.5 percent.

[2]Includes U.S. mail; United Parcel Service; Air Express.

Outbound Shipments

Sixty-five cooperatives reported they shipped 71 million tons of products valued at $8.7 billion in 1971. These cooperatives also reported the percent of

total shipments moved by each type of carrier. These percents were then applied to the total outbound tonnages of the individual cooperatives reporting to show total movement by type of carrier (table 3).

More than 72 percent of all tonnage was shipped by three categories of carrier: Rail (29 percent), cooperatives' own trucks (27 percent), and various for-hire trucks (15 percent). Common carriers accounted for more than half of the for-hire trucking.

For-hire barge, ship, and buyers' and sellers' trucks each accounted for about 6 percent of outbound movement.

Table 3—Outbound shipments from 65 farmer cooperatives, by type of carrier, 1971

Type of carrier	Tons shipped	Percent of total
	Tons	*Percent*
Rail:		
Regular service	20,611,146	29
Piggyback	463,184	1
Own trucks	19,044,994	27
Trucks for-hire:		
Common carrier	5,564,092	8
Exempt hauler (203b-6)	3,092,995	4
Contract carrier	1,738,992	2
Co-op trucking association	764,658	1
Buyers' and sellers' trucks	3,993,003	6
Farmer-owned trucks	363,238	1
Barge, for-hire	4,547,498	6
Barge, owned or leased	44,156	([1])
Ship	4,289,078	6
Pipeline, for-hire	184,000	([1])
Pipeline, owned or leased	([2])	([2])
Other[3]	6,408,343	9
Total	71,109,377	100

[1]Less than 0.5 percent.
[2]No tonnage reported.
[3]Includes air and other tonnage that could not be broken down by type of carrier.

Inbound Shipments

Fifty-eight cooperatives reported they received 65 million tons of products (table 4) valued at $6.2 billion.

Rail accounted for more than one-third of all inbound tonnage (34 percent), followed by for-hire trucks with 25 percent.

An additional 18 percent of inbound tonnage was hauled in the

cooperatives' own trucks. In total, the above categories accounted for 77 percent of the total inbound tonnage.

Table 4—Inbound shipments to 58 farmer cooperatives, by type of carrier, 1971

Type of carrier	Tons shipped	Percent of total
	Tons	*Percent*
Rail:		
Regular service	21,857,880	34
Piggyback	45,220	([1])
For-hire trucks:		
Exempt hauler (203b-6)	5,230,468	8
Contract carrier	5,036,154	8
Common carrier	4,999,768	8
Co-op trucking association	482,554	1
Own trucks	12,011,672	18
Buyers' and sellers' trucks	2,470,139	4
Farmer-owned trucks	2,338,881	4
Barge, for-hire	2,862,148	4
Barge, owned or leased	169,640	([1])
Pipeline, for-hire	1,865,327	3
Pipeline, owned or leased	189,600	([1])
Ship	1,552,337	2
Other[2]	3,958,359	6
Total	65,070,147	100

[1]Less than 0.5 percent.
[2]Includes air and tonnage that could not be broken down by type of carrier.

FACTORS AFFECTING MODE OF TRANSPORTATION

We asked the cooperatives why they used or did not use the various types of regulated and nonregulated transportation available to them. We also asked what problems they experienced in operating their own equipment.

The number of times cooperatives reported reasons they did or did not use various types of transportation will not total the number of cooperatives reporting. Some reported more than one reason; others did not report on all types.

Also, a cooperative that used a particular type of transportation or one that had a particular type available and did not use it may not have reported why it did or did not do so. Similarly, a cooperative that did not have a particular type of transportation available may have simply not answered

the question and was therefore not counted in the reasons—or, it may have given "not available" as an answer and was counted. Therefore, the number of reasons given for using or not using a particular type of transportation does not reflect relative importance when compared with the number of reasons reported concerning another type of transportation.

In the case of for-hire regulated equipment, we are reporting the answers given only on rail, truck, and barge, because other modes are used so infrequently.

Why Cooperatives Used For-Hire Regulated Transportation

Answers to the questions "Why do you use for-hire regulated service?" fell basically into three main types: Economic, service, and availability. Table 5 shows the number of times these reasons were reported by the 63 cooperatives answering these questions.

Table 5—Reasons for using for-hire regulated transportation reported by 63 cooperatives, 1971

Reason	Times reported		
	Rail[1]	Truck[2]	Barge
More economical	34	14	8
Service best suits needs	17	35	4
Available when needed	6	10	-
Other	4	9	-

[1]Includes 3 reasons that relate to piggyback only.
[2]Includes common and contract carriers.

For-Hire Rail

As shown in table 5, for-hire rail was most frequently used for economic purposes. Principal reasons reported in this category were:

1. More economical;
2. Least cost;
3. Quantity handled at lowest cost; and
4. More economical for long hauls.

Service was usually related to the ability to move larger shipments longer distances and to the privileges offered by rail.

For-Hire Regulated Trucks

For-hire regulated trucks were used more often because service best suited the needs of the cooperatives. Most often cited as reasons in this category were:

1. Best for less than truckload lots (LTL) or small lots;
2. Dependability;
3. Faster service;
4. Provide special equipment; and
5. Serves off-track locations.

Respondents cited economic factors as being less costly than other methods, or, less costly for shorter hauls. Availability was most often related to the peak or busy season.

For-Hire Regulated Barge

For-hire regulated barges were generally used because they were the most economical method or best met the cooperatives' needs—primarily because of greater handling capacity.

Why Cooperatives Did Not Use For-Hire Regulated Transportation

Forty-seven cooperatives gave reasons for not using for-hire regulated transportation (table 6).

Table 6—Reasons for not using for-hire regulated transportation reported by 47 cooperatives, 1971

Reason	Times reported		
	Rail[1]	Truck[2]	Barge
Less economical	11	23	-
Service not suited to needs	13	29	7
Inadequate equipment or service	10	2	-
No reason	2	2	-
Other	5	3	1

[1]Includes 17 reasons that relate to piggyback only.
[2]Includes common and contract carriers.

For-Hire Rail

The largest number of reasons for not using for-hire rail indicated that "services were not suited to needs." These reasons depended on the type of cooperative operation involved.

The reasons cooperatives gave for not using for-hire rail that relate to "inadequate equipment or service," include such reasons as:

1. In-transit loss or damage;
2. Shortages of equipment; and
3. Poor or inconsistent service.

For-Hire Regulated Truck

The reasons given for not using for-hire regulated trucks fell primarily in two categories: "Service not suited to needs," and "less economical." When they were less economical than other means of transport, it was usually stated that the rates were too high. When they were not suited to the cooperative's needs, the reasons centered around:

1. Doesn't suit need or no need;
2. Lack of flexibility; and
3. Own trucks and personnel provide better or needed service.

The reasons for not using for-hire barge were mainly because barges were not available at all in cooperative areas or were not readily available.

Why Cooperatives Used Nonregulated Trucks

Information was obtained on the following four types of nonregulated trucks: Exempt hauler (203b-6); buyers' and sellers' trucks (not farmer-owned); farmer-owned trucks; and cooperative trucking associations. These four methods of transportation accounted for 12 percent of the outbound tonnage (table 3) and 17 percent of the inbound tonnage (table 4) of the cooperative reporting.

Two categories represented most of the reasons why the cooperatives reporting used nonregulated trucking: "More economical" and "service best suits needs" (table 7).

Table 7—Reasons for using nonregulated trucks reported by 45 cooperatives, 1971

Reason	Times reported			
	Exempt hauler (203b-6)	Co-op trucking association	Buyers' and sellers' trucks	Farmer-owned trucks
More economical .	25	12	3	1
Service best suits needs.....	25	13	8	1
Other.....	5	3	2	-

Exempt Haulers

Economic reasons for using exempt haulers generally involved more favorable rates or less cost or expense than other methods. When used because "service best suits needs" principal reasons given were:

1. Better or faster service;
2. Specialized service or equipment;
3. Greater flexibility in pickup and delivery;
4. Reliability; and
5. Supplements own equipment in peak seasons.

Co-op Trucking Associations

Co-op trucking associations were used—first, because they best suited co-op needs and second, because they were more economical. When the category was "more economical," the reasons were usually given in that exact term or merely "cost." Similarly, more than half the cooperatives stated "service best suits our needs" and used that, a similar term, or simply "service." Most frequently reported reasons based on service were:

1. Service;
2. Greater flexibility;
3. Special type of equipment;
4. To supplement common carrier;
5. Can be geared to needs;
6. More flexible; and
7. Better control.

Other reasons for using co-op trucking associations were "patronage refunds" and "customer request."

The reasons given for the use of exempt haulers and co-op trucking associations when service is best suited to the needs of the cooperative indicates that the movement of products, rather than mode of transportation, is the critical factor to cooperatives. Four similar reasons are given for using each of the two types of haulers. For example, cooperatives report that both types are used because they provide a specialized service or equipment.

Buyers' and Sellers' Trucks

Three cooperatives reported using buyers' and sellers' trucks because of service. Other service-oriented reasons were: Fits needs of farm-to-market hauling; carry needed equipment (such as loading chutes); and more familiar with farm loading points.

Farmer-Owned Trucks

Only two cooperatives said they used farmer-owned trucks.

Why Cooperatives Did Not Use Nonregulated Trucks

Nonregulated trucks were basically not used by the cooperatives because the services were not suited to their needs. Other reasons for not using trucks related to unreliable or inconsistent service and unexempt commodities, which could not be hauled by exempt haulers (203b-6). Economic reasons were quoted only three times (table 8).

Table 8—Reasons for not using nonregulated trucks reported by 32 cooperatives, 1971

Reason	Times reported			
	Exempt hauler (203b-6)	Co-op trucking association	Buyers' and sellers' trucks	Farmer-owned trucks
Less economical ..	1	2	-	-
Service not suited to needs	12	14	3	2
Unreliable or inconsistent service	5	2	1	1
Commodities not exempt	6	-	-	-
Other.....	3	5	-	-

Exempt Haulers (203b-6)

Cooperatives gave the following answers most frequently as to why services were not suited to their needs:

1. Not available when needed or did not go to all markets; and
2. Limited number of haulers or equipment.

Other reasons singled out problems related to individual cooperatives. Six cooperatives reported that their commodities were not exempt. Five felt that service was inconsistent or unreliable.

Co-op Trucking Associations

The most frequently given reasons as to why services were not suited to the needs were the same for both exempt haulers and co-op trucking associations.

The two dominant causes for stating that service was not suited to needs was that co-op trucking was not available or because of the limited number of haulers or equipment.

Buyers' and Sellers' Trucks and Farmer-Owned Trucks

Only a few cooperatives reported why they did not use either buyers' and sellers' trucks or farmer-owned trucks. Reasons usually dealt with individual cooperative operations.

Why Cooperatives Used Their Own Equipment

Management personnel gave reasons for using their own equipment. These fell into two major categories: Either the service best suited their needs or the use of their own equipment was more economical than other types of transportation (table 9).

Table 9—Reasons for operating own equipment (owned or leased) reported by 43 cooperatives, 1971

Reason	Times reported			
	Trucks	Railcars	Barges	Pipelines
More economical	19	1	3	1
Service best suits needs	41	14	2	1
Other.....	5	-	-	-

Trucks

Where trucks were operated by cooperatives, more than twice as many reported that service rather than economics influenced their use. More than half the number citing service did not elaborate further.

Reasons for using the cooperatives' own trucks that were reported more than once under service best suits needs were:

1. Service;
2. Efficient or effective;
3. Local hauling; and
4. Special equipment.

Cooperatives' attitude toward local hauling in their own trucks differed among associations. For example, one cooperative referred to local hauls as "convenience hauls," while another considered them "nuisance hauls."

When citing economic reasons for using their own trucks, two-thirds of the cooperatives reported economy of operation or cost advantages.

Railcars

Railcars were used primarily because service best suits needs. Principal reasons cited under this category were:

1. To assure or supplement equipment at peak season;
2. Carriers unable to supply adequate numbers of certain types of cars; and
3. Service.

Barge

Barges were owned because they were more profitable or because of low cost to the cooperative. Cooperatives also reported that barge service met their needs because of necessity for special equipment and because service was guaranteed.

Pipelines

Three cooperatives reported they used privately operated pipelines—either because it was cheaper, revenue was greater, or service best fitted their needs.

Problems in Using Own Equipment

Where cooperatives reported they had experienced problems with operating their own equipment or did not use such equipment, the reference was usually to trucks or railcars.

Problems with using railcars were broken down into economic, service, and operational categories (table 10).

Table 10—Disadvantages or problems in operating own railcars, barges, and pipelines, as reported by 20 cooperatives, 1971

Problem	Times reported		
	Railcars	Barges	Pipelines
Economic	13	1	-
Service	12	-	-
Operating	5	-	-
None	1	1	1

Railcars

Railcars presented problems to cooperatives commenting on them that were basically economic and service oriented, almost equally divided between the two. Only five operating problems were mentioned.

The major economic problems were as follows:

1. High leasing costs;
2. Continual leasing payment for seasonal usage; and
3. Inadequate mileage allowances.

Service-connected problems were mostly related to the time involved in the movement of equipment. Most of the problems were:

1. Slow return of equipment;
2. Transit time too long;
3. Slow service; and
4. Poor service or handling by railroads.

Barges

Only two cooperatives commented on the use of private barges. One stated that they were too costly except for bulk commodities. The other stated that they had no problems.

Trucks

Owned or leased trucks provided their own set of disadvantages or problems (table 11).

Table 11—Disadvantages or problems in operating own trucks reported by 41 cooperatives, 1971

Problem	Times reported
Operating	16
High operating costs	9
High capital investment	7
Meeting Federal and State laws and regulations	6
Labor	4
Other	1
No particular problems	14

Principal operating problems reported by 41 cooperatives were:

1. Maintenance;
2. Under-utilization;
3. Shortages of drivers and trucks during peak periods;
4. Excess of drivers and trucks during slack periods;
5. Obtaining backhauls; and
6. Control over dispatching and maintenance.

Comments on high operating costs were generally that such costs were excessive due to low utilization, that they had problems generating enough savings on maintenance to justify use, or that rising wage rates reduce advantages of the use of their own trucks.

When high capital investment was reported as a disadvantage these were the principal reasons given:

1. No return on capital investment;
2. Difficulty in acquiring and maintaining a capital reserve;
3. Initial investment;
4. Capital requirements;
5. Tied up capital in equipment; and
6. Capital could be used better in other areas.

Labor problems center around the difficulty of getting good drivers and high labor turnover.

Seven cooperatives reported they had trouble complying with complex Federal and State highway regulations and reporting requirements.

Ten cooperatives volunteered they had experienced no problems in operating their own trucks. Three others reported only normal operating problems. One other reported few problems and believed problems would be greater if they used any other method of transporting to retail outlets.

JOINT PROGRAMS

While some joint distribution, warehousing, and transportation interchanges are now being used by cooperatives, the extent of these operations are not fully known.

To determine to what extent joint efforts were being conducted among the top 100 cooperatives, they were asked "Do you have any joint transportation or distribution programs with other firms;" If they did, they were asked what the efforts were and the type of firms participating.

Sixty-one cooperatives answered the question and 16 stated that they were participating in joint programs. The participation was mostly with other cooperatives, but some was with private organizations.

Some of the cooperatives participated in more than one type of joint effort. Six were participating in interchange of transportation equipment, five in trucking, five in distribution, and three in warehousing.

OTHER PUBLICATIONS

Changing Transportation in Grain Marketing. Robert J. Byrne. Reprint 372, 1970. 3 pp. (Reprinted from June 1970 News for Farmer Cooperatives.)

Controlling Motortruck Operating Costs of Farmer Cooperatives. Thomas H. Camp and W. R. Kriebel. Information 58, 1968. 29 pp.

Filing Rail Grain Loss Claims. Gene F. Miller. Information 61, 1968. 21 pp.

Motortrucks Operated by Farmer Cooperatives—Number, Type, Operating Characteristics. Thomas H. Camp and William M. Holroyd. Research Report 2, 1968. 22 pp.

Owning or Leasing of Covered Hopper Cars by Farmer Cooperatives. Thomas H. Camp and David Volkin. General Report 144, 1967. 25 pp.

Extent of Traffic Management in Farmer Cooperatives. Robert J. Byrne. Information 44, 1964. 5 pp.

Motortruck Operating Costs of Farmer Cooperatives. Thomas H. Camp. General Report 121, 1964. 9 pp.

Safety-Checking Handling Practices to Reduce Livestock Losses. Joseph E. Rickenbacker. Information 45, 1964. 18 pp.

Safety-Checking Livestock Trucking to Reduce Loss and Damage. Joseph E. Rickenbacker. Information 33, 1963. 19 pp.

Transportation and Handling of Seed by Regional Cooperatives in the Southeast. Charlie B. Robbins. General Report 101, 1962. 30 pp.

For copies, write Farmer Cooperative Service, U.S. Department of Agriculture, Washington, D.C. 20250.

FARMER COOPERATIVE SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Farmer Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The Service (1) helps farmers and other rural residents obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The Service publishes research and educational materials and issues *News for Farmer Cooperatives*. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.